

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-2 (canceled)

1 **Claim 3 (previously presented):** A method for producing a
2 semi-conducting device comprising at least a first layer doped
3 with a doping agent and a second layer deposited on said first
4 doped layer in a single reaction chamber, wherein the
5 deposition steps of said first and second layers are separated
6 by an operation for avoiding the contamination of said second
7 layer by the doping agent, wherein said operation comprises a
8 dosing of the reaction chamber with a vapour or gas comprising
9 water, methanol, isopropanol or another alcohol.

1 **Claim 4 (previously presented):** A method for producing a
2 semi-conducting device comprising at least a first layer doped
3 with a doping agent and a second layer deposited on said first
4 doped layer in a single reaction chamber, wherein the
5 deposition steps of said first and second layers are separated
6 by an operation for avoiding the contamination of said second
7 layer by the doping agent, wherein said operation comprises a
8 dosing of the reaction chamber with a vapour or gas comprising
9 ammonia, hydrazine or volatile organic amine.

1 **Claim 5 (previously presented):** The method of claim 3,
2 wherein said dosing is performed at around 0.05 to 100 mbar
3 and between 100 and 350°C for less than 10 minutes.

1 **Claim 6 (previously presented):** The method of claim 3,
2 wherein the doped layer is a p-doped layer.

1 **Claim 7 (previously presented):** The method of claim 3,
2 wherein the doped layer is a n-doped layer.

1 **Claim 8 (previously presented):** The method of claim 6,
2 wherein said operation is followed by the deposition of a
3 buffer layer on the p-layer.

1 **Claim 9 (previously presented):** The method of claim 3,
2 wherein said dosing is followed by a pumping at high vacuum
3 and between 100 and 350°C for less than 5 minutes.

Claims 10-13 (canceled)

1 **Claim 14 (previously presented):** The method of claim 3,
2 wherein said doping agent on the surface of a substrate is
3 transformed into stable chemical compounds.

1 **Claim 15 (previously presented):** The method of claim 4,
2 wherein said dosing is performed at around 0.05 to 100 mbar
3 and between 100 and 350°C for less than 10 minutes.

1 **Claim 16 (currently amended):** The method of claim 4,
2 wherein said ~~dosing~~doping agent comprises ~~trimethylborone~~
3 trimethylboron.